

|                                                           |           |
|-----------------------------------------------------------|-----------|
| <b>TABLE OF FIGURES.....</b>                              | <b>2</b>  |
| <b>ACKNOWLEDMENT.....</b>                                 | <b>3</b>  |
| <b>ABSTRACT .....</b>                                     | <b>5</b>  |
| <b>INTRODUCTION .....</b>                                 | <b>6</b>  |
| QUADCOPTERS .....                                         | 7         |
| AR-DRONE .....                                            | 7         |
| <i>Hardware and Software Specification .....</i>          | <i>8</i>  |
| <b>CONTROLLABILITY ISSUES .....</b>                       | <b>9</b>  |
| <b>RELATED WORK .....</b>                                 | <b>9</b>  |
| <b>THESIS HYPOTHESIS .....</b>                            | <b>12</b> |
| <b>GESTURE CONTROLLER DESIGN AND IMPLEMENTATION .....</b> | <b>13</b> |
| GESTURE LANGUAGE.....                                     | 13        |
| ARCHITECTURE DESIGN.....                                  | 17        |
| MACHINE LEARNING .....                                    | 18        |
| SENDING COMMANDS TO THE DRONE.....                        | 23        |
| <b>EXPERIMENT DESIGN .....</b>                            | <b>24</b> |
| <b>ANALYSIS OF EXPERIMENTAL RESULTS .....</b>             | <b>26</b> |
| <b>LESSONS LEARNED / CONTRIBUTIONS .....</b>              | <b>31</b> |
| <b>FURTHER STUDIES.....</b>                               | <b>33</b> |
| <b>REFERENCES .....</b>                                   | <b>35</b> |